



# UNITED STATES PATENT AND TRADEMARK OFFICE

5.2

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,747	06/21/2001	Mihaela Van Der Schaar	US 000168	7494

24737 7590 08/04/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, RICHARD J

ART UNIT	PAPER NUMBER
----------	--------------

2613

DATE MAILED: 08/04/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/887,747

Applicant(s)

VAN DER SCHAAR ET AL.

Examiner

Richard Lee

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-19,21-31,33-43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-19,21-31,33-43 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2613

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3, 5, 7-19, 21-31, 33-43, and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. It is again that in the present case, descriptions of various elements within Figure 1 have been omitted in the Specification. The applicants' reason for this is due to the fact that motion compensation is well known in the art and need not be discussed, as specified at page 4 of the specification. It is however imperative and a requirement for the applicant to provide an adequate written description for the features as shown for completeness, even though Figure 1 is presented as prior art. Further, descriptions of various elements within Figure 3a have been omitted in the Specification. Figure 3a combines most of the features of Figure 1, and as such it is again a requirement that the specification provide a written description for all the elements within Figure 3a so as to enable one skilled in the art.

Art Unit: 2613

At pages 11-12 of the amendment filed May 17, 2004, the applicants have traversed the 35 U.S.C. 112, first paragraph rejection for the claims on the grounds that the Examiner has not 1) identified the claim limitations which have not been adequately described in the specification and 2) provided a preponderance of evidence showing why a person skilled in the art would not recognize in applicant's disclosure a description of the invention defined by the claims, and as such the rejection should be withdrawn. It is submitted that the claims in general recite the particular encoding in base and enhancement layers of a video signal with specifics of the transmission of the video in connection with the base and enhancement layers. As understood by the Examiner, part of the claimed invention is derived from Figure 3a of the drawings. Since the Specification does not provide an adequate written description for both Figures 1 and 3, as described in the paragraph above, one skilled in the art would hence have difficulty recognizing in the disclosure a description of the invention defined by the claims. One skilled in the art would also have the undue burden of understanding and arriving at the claimed invention given the lack of written description of the invention. For the above reasons, the rejection of the claims under 35 U.S.C. 112, first paragraph is deemed appropriate and as such is maintained.

3. Claims 16-19, 21-25, and 41-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examples:

(1) claim 16, line 1, claim 21, line 1, claim 23, line 1, after "set of", "enhancement" should be properly inserted in order to provide proper antecedent basis for the same as specified at claim 15, line 7, respectively; and

Art Unit: 2613

(2) claim 41, line 15, "said indicators" shows no clear antecedent basis.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5, 7-19, 21-31, 33-43, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al of record (6,263,022).

Chen et al discloses a system and method for fine granular scalable video with selective quality enhancement as shown in Figures 2 and 3, and the same method, system, and apparatus as claimed in claims 1-3, 5, 7-19, 21-31, 33-43, and 45 for improving the transmission efficiency of an original video signal transmitted as a plurality of frames, the frames containing the video signal encoded in a base layer and an enhancement layer wherein at least one element of the enhancement layer is selectively enhanced by designating the at least one selected element to have a higher priority of transmission (i.e., the bitplanes of upwardly shifted macroblock or block of the enhancement layer are selectively coded and transmitted with higher priority, see column 5, line 54 to column 7, line 6, column 13, lines 46-67), comprising the same means for transmitting a first set of criteria in a first one of the frames (i.e., the transmission of base and enhancement layers as shown in Figure 2 includes sets of criteria and see column 5, line 54 to column 6, line 25); means for transmitting an indicator (i.e., shifting factor and mode indicator, see column 4, lines 10-22, column 6, line 41 to column 7, line 35, column 13, lines 46-66) in subsequent ones of the frames when elements contained within the subsequent ones of the frames

Art Unit: 2613

have substantially the same set of criteria as the first set of criteria (see column 5, line 54 to column 6, line 25); wherein the first set of criteria includes at least one enhancement factor value, wherein the at least one enhancement value is applied and corresponds to each element within in the enhancement layer, the at least one enhancement factor value is power of two (i.e., the shift factor values provide the enhancement factor value, see column 4, lines 10-22, column 6, line 53 to column 7, line 24, column 13, lines 46-67); the first set of criteria includes position, size and enhancement factor value, wherein the position is selected with respect to a known point (i.e., the position and size of blocks/macroblocks, and shifting factor (enhancement factor value) indicating higher priority thereby enhancing the image (see column 6, line 53 to column 7, line 6, column 8, lines 6-25)); wherein the first set of criteria includes at least one second indicator (i.e., flag at the beginning of each block, see column 7, lines 13-18) that indicates a corresponding known value, the known value is selected from the group consisting of position, displacement vector, size, and enhancement factor, wherein the indicator is substantially the same as the at least one second indicator; wherein the elements comprise a plurality of pixels in an array having an equal number of rows and columns, wherein the number of rows is selected from the group consisting of 2, 3, 4, 8, 16 (see column 6, line 53 to column 7, line 6, column 8, lines 6-25); wherein the enhancement layer is fine granular scalability encoded (see column 2, lines 43-60, column 8, lines 32-40); means for receiving the first set of criteria in the first one of the frames and the indicator in the subsequent ones of the frames and means for applying the first set of criteria to the elements of the subsequent ones of the frames when the indicators are detected in the subsequent one of the frames (see column 14, lines 1-24).

Art Unit: 2613

6. Regarding the applicants' request at page 11 of the amendment filed May 17, 2004 for the Examiner to indicate whether the formal drawings mailed on August 30, 2001 have been received, the Examiner has reviewed the file and it appears that a set of formal drawings were filed on September 4, 2001. If the applicants believe that the drawings filed on September 4, 2001 are incorrect, then it is suggested for the applicants to resubmit the formal drawings.

At pages 12-13 of the amendment filed May 17, 2004, the applicants argued that "... Chen merely describes a shift factor that shifts the bit-planes up or down, depending on the sign of the shifting factor. Specifically, if a macroblock or block is identified as being more visually important by the base layer quantization parameters or some other criteria, then the bit-planes of the identified macroblock or block can be shifted up. The bit-planes of the upwardly shifted macroblock or block can be coded with higher priority than the same bit-planes of the other data units. Accordingly, withdrawal of the rejection under 35 USC 102(e) is respectfully requested ...". It is submitted that the particular teachings of Chen et al involving the shifting of bit-planes of the upwardly shifted macroblock or block in the enhancement layer to be coded with higher priority than the same bit-planes of the other data units (see column 5, line 54 to column 7, line 6, column 13, lines 46-67) nevertheless reads on the feature of "wherein at least one element of the enhancement layer is selectively enhanced by designating at least one element to have a higher priority of transmission", as claimed. Further, it is submitted again that Chen et al shows the same means for transmitting a first set of criteria in a first one of the frames (i.e., the transmission of base and enhancement layers as shown in Figure 2 includes sets of criteria and see column 5, line 54 to column 6, line 25), and means for transmitting an indicator (i.e., shifting factor and mode indicator, see column 4, lines 10-22, column 6, line 41 to column 7, line 35,

Art Unit: 2613

column 13, lines 46-66) in subsequent ones of the frames when elements contained within the subsequent ones of the frames have substantially the same set of criteria as the first set of criteria (see column 5, line 54 to column 6, line 25), as claimed. For the above reasons, it is submitted that the claimed invention is rendered anticipated by Chen et al.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any response to this final action should be mailed to:

Box AF  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE") (for informal or draft communications, please label "PROPOSED" or "DRAFT")

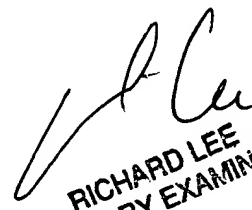
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



Art Unit: 2613

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.

  
RICHARD LEE  
PRIMARY EXAMINER

Richard Lee/rl 

7/29/04